

	Application No.	Applicant(s)	
	09/920,903	0,903 AGEE ET AL.	
Notice of Allowability	Examiner	Art Unit	
	KHAI TRAN	2637	
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not includ will be mailed in due	ed course. <b>THIS</b>
1. 🔀 This communication is responsive to the amendment filed	<u>9/07/2005</u> .		
2. The allowed claim(s) is/are 11-60.			
<ol> <li>Acknowledgment is made of a claim for foreign priority until a)</li> <li>All b)</li> <li>Some* c)</li> <li>None of the:</li> <li>Certified copies of the priority documents have</li> <li>Certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ol> * Certified copies not received: <ol> <li>Certified copies</li> </ol>	been received. been received in Application No		tion from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the re	uirements
4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give			OTICE OF
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached			
1)  hereto or 2)  to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t			back) of
DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I			Note the
Attachment(s)  1. Notice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)  3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	5.  Notice of Informal Pa 6.  Interview Summary Paper No./Mail Date 8), 7.  Examiner's Amendre 8.  Examiner's Stateme 9.  Other	(PTO-413), e nent/Comment	

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## REASONS FOR ALLOWANCE

1. The amendment filed 9/07/2005 has been entered. Claims 11-60 are pending in this Office action.

## Terminal Disclaimer

2. The terminal disclaimer filed on 9/07/2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the U.S. Pat. 6,359,923 has been reviewed and is accepted. The terminal disclaimer has been recorded.

## Allowable Subject Matter

- 3. Claims 11-60 are allowed.
- 4. The following is an examiner's statement of reasons for allowance: none of the prior art of the record discloses or suggests a bandwidth-efficient communications comprising: spreading a second data signal at the base station, with second spreading codes derived from the despreading codes, the second spreading codes based on substantial channel reciprocity between the first said-propagation direction and thecereverse propagation direction, the second spreading codes redundantly spreading the second data signal over a plurality of discrete tones and over at least two of the antenna elements of the array, to form a second spread signal that is thereby both spectrally and spatially spread.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mongrantum
KHAI TRAN
Primary Examiner

Art Unit 2637

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September 27, 2005